



STATE OF THE PORTS

COVID, containers, congestion, catastrophes – what's next? More demand! Supply Chain Policy in the Spotlight

20 When to Automate

26 HR Legal and Regulatory Concerns

Connecting Rail and Ship in Oakland

Corrosion is the enemy. **RG-2400** is the solution. Industry leader offering proven products.



ReactiveGel*

1 GALLON PAIL 128 Fluid Dunces; 3.8 Liters)

the support of the second second second

Main Rating: Health - T. Flammability - 1, Physical Hara To Colore Conserve & Colores, Mary Colore and a

CONV Threaded Fastener Corrosion Un Mixing Equipt

Polyguard RG-2400 Corrosion Control Gel responds with elements of new and existing steel pipe to form an ultra-thin glasslike protective surface. This layer of protection will fight off everything nature throws at it.

OSHA Hazard Warning(s): May Cause Skip E Skin, Eye, & Respiratory Irritation



214-515-5000

FORM & FUNCTION Lineage Logistics Portsmouth, VA

With warehouse clear heights and free span interior wall heights ever increasing, we designed both our panels AND our facilities to accommodate span capabilities over 70' long to help you minimize stack joints and mid-girt attachments, lower project costs, and save time on your overall schedule.

Have an upcoming project that pushes the limits of these new height demands? Discover a better way at **truecorepanels.com**





DEPARTMENTS

34 Cold Chain Development

- 36 Cool Solutions
- 38 Industry Calendar
- 39 Member News
- 40 Association News
- 43 New Members

COLUMNS

06 Leadoff**45** Cool Person



About the Cover Lineage Cool Port Oakland, California, United States. Ports impacted by the pandemic and traffic remain in high demand. See the article on page 12. (Photo courtesy of Dreisbach Enterprises.)

CONTENTS

MAY-JUNE 2021

FEATURES

Supply Chain Policy in the Spotlight

The increased focus on supply chain issues represents an opportunity for the cold chain industry. *By Lowell Randel*

12

80

State of the Ports

COVID, containers, congestion, catastrophes – what's next? More demand! *By Karen E. Thuermer*



20

When to Automate

Automating a system or process is a big decision – here are factors to consider. *By Alexandra Walsh*

HR Legal and Regulatory Concerns

Four issues offer challenges and opportunities for the cold storage industry. *By Sheryl S. Jackson*

5(

Connecting Rail and Ship in Oakland

Fisher Construction Group finds success with Lineage Logistics Cool Port design/build. *By Keith Loria*













OUR PRODUCT GUARANTEE FSMA COMPLIANCE HEALTHY RETURN ON INVESTMENT ENERGY SAVINGS

WHAT WE KNOW

Breaks in the Vapor Barrier around the perimeter and between the separation walls inside your facility form ice and condensation and are costing you tens of thousands of dollars every month.

Those Breaks in the Vapor Barrier forming ice and condensation are violations of the FSMA, FDA and OSHA regulations. Most local utilities and the IRS recognize Vapor Armour applications as qualified energy efficiency addition under the Utilities' Programs and IRS section 179D.

Every year, money is wasted or lost on energy costs, unused utility credits, and unused IRS energy tax deductions, all while violating the FSMA, FDA and OSHA.

HOW WE CAN HELP

By permanently sealing your vapor barriers you will save 17–35% in energy costs.

Vapor Armour guarantees its vapor barrier will stop ice and condensation for at least 15 years.

A Vapor Armour installation pays for itself in 3–5 years (ROI/ROC) and provides an additional 10–12 years of energy savings.



View our case studies on energy savings at **VAPORARMOUR.COM** or call **855.437.0446** for more information.

LEADOFF

MESSAGES FROM GCCA LEADERS

We Are the Cold Chain – Stronger Together

LAST WROTE THIS COLUMN IN APRIL 2020, AS MILLIONS OF PEOPLE AROUND THE WORLD WERE TRYING TO TACKLE THE LOGISTICS OF HOW TO GET FOOD, MEDICINE, PPE, AND OTHER ESSENTIALS IN A NEW WORLD WHERE AUTHORITIES WERE TELLING THEM NOT TO LEAVE THEIR HOMES.

I noted that as GCCA members representing the warehouse workers, the logistics experts, transportation providers, and construction professionals, we were all keeping the food supply chain moving and building capacity into the system.

Last year tested the flexibility, nimbleness, and strength of that supply chain, and it proved to be strong and resilient. GCCA's transportation division, made up of cold chain shippers, transporters, and third party logistics providers, rose to the many challenges of a global pandemic.

However, there are still challenges, like the shrinking pool of qualified drivers in many parts of the world. And aside from a multiyear global pandemic, there are other disruptors. For instance, a container vessel stuck sideways in the Suez Canal for almost a week and monthslong traffic jams at some of the world's busiest seaports. (See the article on page 12.)

These disruptions impact the entire length of the supply chain and are not just a transportation issue. A disruption in the supply chain, whether at the seaport, the airport, on rail or highway, impacts the whole GCCA community – warehousing and logistics, transportation and construction, and the economy at large. As an example, disruptions in the supply chain can wreak havoc for GCCA members in controlledenvironment construction when they cause delays on new builds or renovations. As this is the annual COLD FACTS transportation issue, I also want to applaud the Certified Cold Carrier, which launched three years ago this June. This valuable thirdparty certification demonstrates to shippers, government officials, and third-party auditors that the 13 Certified Cold Carriers met stringent standards for cold chain transportation best practices.

And in another opportunity to learn and apply transportation best practices, the WFLO Institute West will be held in person in Tempe, Arizona, from September 26 to 29 (moved from May) and offer a Transportation Track again this year.

Regardless of whether your core expertise is transportation, warehousing and logistics, construction, or international development projects, we are all GCCA members. We are the experts and leaders in the temperaturecontrolled perishable products industry. We are still the cold warriors on the frontlines, committed to forging a universally strong cold chain where every product retains its integrity and safety through each link of the chain.

I ended the column last year with the conviction that we were stronger together and the hope that we would get through the year together. We are, and we did. \otimes



TODD LANTER IRTA CHAIR



COLD FACTS magazine is published every other month by the **Global Cold Chain Alliance** (GCCA), an organization that unites partners to be innovative leaders in the temperature-controlled products industry. The GCCA Core Partners are:

The International Association of Refrigerated Warehouses (IARW), which promotes excellence in the global temperature-controlled warehouse and logistics industry.

The World Food Logistics Organization

(WFLO), which delivers education and research to the industry and empowers economic development by strengthening the global cold chain.

The International Refrigerated Transportation Association (IRTA), which cultivates, fosters and develops commercial and trade relations between all those engaged in the transportation and logistics of temperature-controlled commodities.

The Controlled Environment Building

Association (CEBA) represents the design and construction industry specializing in temperature-controlled facilities that prioritize product safety best practices. We are the source for best practices of building and maintaining the thermal envelope.

CONTACT US:

COLD FACTS Magazine Global Cold Chain Alliance Attn: Megan Costello 241 18th Street South Suite 620 Arlington, Virginia 22202 United States

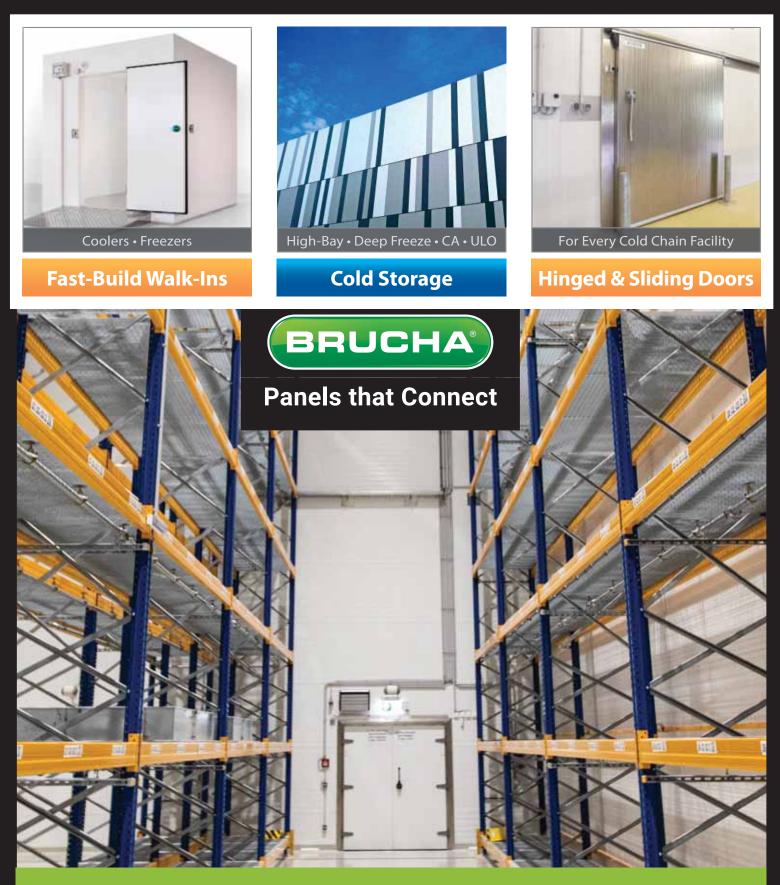
tel +1 703 373 4300 fax +1 703 373 4301 mcostello@gcca.org | www.gcca.org

COLD FACTS welcomes editorial ideas; contact Editor-In-Chief Alexandra Walsh at +1 301 523 3318 or **awalsh@associationvision.com**. Contact Jeff Rhodes at +1 410 584 1994 or **jeff.rhodes@mci-group.com** for advertising opportunities in GCCA publications.

Design by SWALLIS Design, San Francisco, California, USA.

While the material in this publication has been compiled with care, the Global Cold Chain Alliance (GCCA) has not validated all of the information contained herein and does not assume any responsibility for its use, accuracy, or applicability. As used above, GCCA shall mean the organization, GCCA Core Partners, and each organization's directors, officers, employees, volunteers, members, and agents.





BRUCHA has been supplying the highest quality Insulated Metal Panels and Doors for over 70 years. Check out our competive pricing and contact us today for a quote.

BRUCHA Corp. | Denver, CO | (866) BRUCHA1 | infousa@brucha.com

www.brucha.com

SUPPLY CHAIN POLICY IN THE SPOTLIGHT

The increased focus on supply chain issues represents an opportunity for the cold chain industry.

By Lowell Randel

he COVID-19 pandemic has highlighted the critical role of supply chains to a strong economy where consumers have reliable access to essential goods such as food. While the food supply chain has shown resiliency and strength, disruptions have highlighted some challenges. As a result, policy makers are paying closer attention to supply chain issues.

In the near term, Congress has provided the United States Department of Agriculture (USDA) with funds to support the food supply chain through COVID relief legislation. The recently passed American Rescue Plan includes \$4 billion to support food supply chain and agriculture pandemic response. Key provisions include:

- Increasing food available for distribution through food banks, nonprofits or restaurants to help feed families in need and at the same time supporting farmers by purchasing their products.
- Providing grants and loans to reimburse or purchase personal protective equipment, test kits, and other measures to keep essential food workers safe.
- Investing in infrastructure and retooling support for food processors, farmers markets, food banks, local food systems and producers to build resiliency in the food supply for the long term.
- Funding the monitoring of COVID-19 in animals and reducing overtime inspection fees paid by small meat and poultry processors, supporting livestock and animal health.

In addition, the COVID Stimulus Package, part of the Consolidated Appropriations Act passed in December 2020, authorized no less than \$1.5 billion for grants to small or midsized food processors or distributors, seafood processing facilities and processing vessels, farmers markets, producers or other organizations to respond to coronavirus, including for measures to protect workers against COVID-19.

Advocating for Relief

GCCA is actively engaging with the Biden Administration to ensure that these pandemic relief funds can be used to assist companies in the cold chain. GCCA has met with officials at the White House and leaders at USDA to highlight the impacts to the cold chain industry, and how our members have stepped up during the pandemic to maintain supply chain integrity while ensuring food safety and quality.

Access to grants under the Stimulus Package and the American Rescue Plan would provide much needed relief to help our members through this difficult time. GCCA has requested that grants be made available to food logistics companies to help offset COVID-related expenses including:

Cold Storage Rack Repair Experts

MAC+RAK

Faster cold storage turn rates mean greater opportunity for forklift abuse and rack damage!

We offer a Complete Line of Engineered Rack Repair and Protection Products



On Time, On Budget with Minimal Disruption

Mac Rak designs, engineers and manufactures all of our products in-house and in the USA.

We produce over 30 column designs which allows Mac Rak to offer **repairs for all types of racks on all types of rack systems.**



For pallet rack repair assessments and a full line of engineered pallet rack repair and protection products

815-723-7400 or visit MacRak.com



Shawn MacDonald Owner of Mac Rak, Inc.

7 мні









containers. As a consequence, this disruption caused many of our members to face significant per diem, detention and demurrage charges outside of their control. The disruption in flow of containers also led to added fuel and energy costs to keep refrigerated containers at the proper temperature to preserve food safety and

protect their workforce.

temperature to preserve food safety and quality while our members waited for the supply chain to move. Supply chain disruptions have also caused increased costs related to critical materials and inputs and led to much longer lead times in procurement.

PPE, Cleaning and Worker Protection Technologies: Worker safety remains a top priority for GCCA and its members. Throughout the pandemic, our members have made significant investments in

personal protective equipment (PPE), cleaning and sanitation products and

services and new technologies including air filtration and electrostatic cleaning to

Detention, demurrage and related costs

of supply chain disruptions: Supply chain disruptions caused challenges to the efficient flow of import and export

• Labor costs: The pandemic has placed strains on the labor market, causing major costs to our members. Whether it is a lack of childcare or concerns over using mass transit, during this pandemic our members have faced a labor shortage to meet growing demands. To stay operational, companies have been paying overtime and premium pay rates to team members healthy and willing to work, and in addition, many companies have hired outside labor, which often comes with a hefty price tag.

GCCA is also encouraging USDA to utilize funds from the American Rescue Plan to provide loans to food logistics companies to help strengthen the food supply chain for the future. The financial impacts of the pandemic have placed major constraints on the ability of our members to invest in facility improvements and capacity expansions. Resources were shifted away from capital budgets to address the extraordinary expenses incurred responding to the pandemic. Loans should be made available to provide viable capital options so companies can strengthen their infrastructure to meet future supply chain needs. "GCCA has met with officials at the White House and leaders at USDA to highlight the impacts to the cold chain industry, and how our members have stepped up during the pandemic to maintain supply chain integrity while ensuring food safety and quality."

Supply Chain Executive Order

While COVID relief programs can assist in mitigating the immediate impacts of the pandemic, the Biden Administration is also considering broader policies to strengthen supply chains for the future. On February 24, 2021, President Biden signed an Executive Order on America's Supply Chains. The order asserts that the United States needs resilient, diverse and secure supply chains to ensure our economic prosperity and national security. Resilient American supply chains will revitalize and rebuild domestic manufacturing capacity, maintain America's competitive edge in research and development and create well-paying jobs. They will also support small businesses, promote prosperity, advance the fight against climate change and encourage economic growth

The Executive Order calls on the federal government to conduct supply chain assessments for critical sectors, including food and agriculture. Within one year of issuing the order, the Secretary of Agriculture, in consultation with the heads of appropriate USDA agencies, shall submit a report on supply chains for the production of agricultural commodities and food products.

The report will include a review of the critical goods and materials underlying the food supply chain, the manufacturing or other capabilities necessary to produce the critical goods and materials to support the food supply chain, and risks or other contingencies that may disrupt, strain, compromise, or eliminate the food supply chain. The report will assess the resilience and capacity of American manufacturing supply chains and the industrial and agricultural base of the United States to support national and economic security and emergency preparedness.

Sectoral reports will also include specific policy recommendations for ensuring a resilient supply chain for the sector. Such recommendations may include sustainably reshoring supply chains and developing domestic supplies, cooperating with allies and partners to identify alternative supply chains, building redundancy into domestic supply chains, ensuring and enlarging stockpiles, developing workforce capabilities, enhancing access to financing, expanding research and development to broaden supply chains, addressing risks due to vulnerabilities in digital products relied on by supply chains and addressing risks posed by climate change.

The increased focus on supply chain issues represents an opportunity for the cold chain industry. GCCA will continue to work closely with the White House and USDA on pandemic relief programs and the upcoming supply chain assessments to promote and protect the interests of the cold chain. *©*

LOWELL RANDEL is Senior Vice President, Government and Legal Affairs at GCCA.

EMAIL: lrandel@gcca.org



COLD SUMMIT DEVELOPMENT A Leading Developer of Cold Storage Facilites





www.coldsummit.com

By Karen E. Thuermer



STATE OF THE PORTS

COVID, containers, congestion, catastrophes – what's next? More demand!

OVID-19 created the perfect storm. The pandemic caused supply chain disruptions in ways unimagined: equipment imbalance, port congestion, ill staff at seaports and terminals, and capacity restraints across all transportation modes. Add to this severe winter weather on the United States East Coast and Texas, tornadoes and flooding in the U.S. Midwest, and a mammoth containership grounded on a sandbar blocking the world's busiest trading route – the Suez Canal.

COVER STORY



Meanwhile, consumers increased their internet purchasing to what is being called the biggest shift in spending behavior since the 1970s. In-home cooking exploded along with demand for prepared foods and meal kits.

Warehouses across all industries are trying to restock, yet schedule reliability for ocean shipping remains unstable and weighs heavily on available capacity. United States inland networks, including warehousing, truck and rail, are being tested like never before.

California Chaos

Vessel queues and wait times, especially at the Ports of Los Angeles and Long Beach in California, remain significant with some vessels waiting to berth for more than 30 days.

Compounding this was the impact of China's cancellation of intercountry travel for its Chinese New Year. This meant factories kept in production continued pumping out goods. Port of Oakland, California, United States. (Photo courtesy of Fisher Construction Group.)

"Usually, it's a time when Asian business closes for three weeks, steamship lines divert sailings, and there are fewer arrivals on the U.S. West Coast," says Jason Dreisbach, President, Dreisbach Enterprises.

Instead, imports surged, and containers needed for export became in short supply. By mid-February, the Port of Los Angeles reported some 62 vessels, including 20 containers ships, were anchored awaiting berth space. Container and street dwell times were double the pre-import surge.

While the Port of Oakland primarily handles exports, it too experienced a record number of vessels in its "parking lot" in mid-March. "Some 14 in the bay and six outside the Golden Gate Bridge," says Dreisbach.

Compounding the problem, in January some 700 dockworkers reportedly contracted COVID and hundreds of others took time off for pandemic-related reasons, leaving both Los Angeles and Long Beach ports severely shorthanded.

To prevent a similar fate, Konoike-Pacific California – a cold storage, port/drayage, transportation and handling company with operations four miles from the ports, added an additional 10 percent of workers to ensure an adequate labor force. "We created our own herd immunity here," says President and COO Rich Burke. "Not doing the same killed the terminals."

Meanwhile, the Port of Oakland in Northern California worked with the Pacific Maritime Association (PMA) to hire multiple new workers and add extra shifts where possible. The result: the port has shorter dwell times. "Where typically a container would be at berth for three days, they are trying to turn the container in two days to get vessels in and out," Dreisbach says.

Consequently, however, Lineage Cool Port Oakland, which Dreisbach Enterprises operates with Lineage Logistics, has less time to turn export products. "That creates its own set of challenges," Dreisbach admits.

But even in 2019 and before, the supply chain faced challenges for issues like labor shortages, reefer container and truck chassis availability and port gate hours of operation and cut-off times.

"Each year, we see increases in import and export container shipping volumes due to factors like globalization, year-round demand of certain products and specialization of production," comments JD Schwefler, Vice President of Business Development, North America, Americold. "We expect these trends will continue."

Additional Impact

Importers are also feeling the crunch.

Dreisbach sees fresh product that would normally go to Los Angeles and Long Beach being diverted to Oakland where dwell times are shorter. "Shippers are trying to keep some of their shelf life," he says.

For example, shipments of lamb ordered for the Easter holidays were especially compromised with some customers not receiving their orders. "The lamb," Dreisbach explains, "comes from Australia and New Zealand and typically arrives at the Port of Oakland where most is transported to Los Angeles by feeder vessel." But given unreliable arrival days, vessels keep missing the feeders.

Demand surges are also creating bottlenecks at inland terminals and with modes of inland transport. Demand has spiked for trucking capacity as grocers and retailers look to restock shelves and communities demand shipments of the highly coveted COVID-19 vaccine. Not surprising, trucking rates have surged.

"Meanwhile, the movement from just-intime inventory management to a safety stock arrangement has caused an uptick in storage needs by customers," reports Andy Janson, President, MTC Logistics. "The present import-heavy cargo movements are causing congestion at major ports, slowing cargo movement to international refrigerated distribution centers. This, in turn, slows delivery to retailer DCs, causing reduced product inventory in stores."

There is also a shortage of reefers, which some executives say is the result of a strategy in China. "Imported reefers to China are backlogged at Chinese ports due to examinations being placed on frozen and refrigerated foods under the disguise of a potential COVID-19 virus on frozen foods," Janson says.

Consequently, some ocean carriers are refusing to take U.S. frozen export bookings for fear of containers being detained at Chinese ports. Others are transporting empty



PortMiami, Florida, United States. (Photo Courtesy of Port Miami.)

PORTMIAMI POISED FOR GROWTH

PortMiami, now ranked number eight nationwide for reefer import cargoes, has been shattering records. Despite the pandemic, the Caribbean and Latin American markets posted impressive gains into Port-Miami last year. Shipments were up 46% from Honduras; 900% from Mexico; and 76% from Dominican Republic.

"Approximately 46% of our calls come from these regional markets," reports Eric Olafson, Director, Global Trade & Business Development, PortMiami.

Smaller ships are utilized in these markets, and the port also receives today's large container vessels that operate on global rotations.

In April, PortMiami set a new record for the largest container ship to ever call at a Florida port with the arrival of the CMA CGM Argentina, a 15,000+ TEU vessel. "We were not even on its regular rotation," reports Olafson "There is so much additional consumption that the steamship line added Miami as a fourth port call."

Thanks to infrastructure improvements completed at the port prior to the pandemic, PortMiami can handle these colossal ships. Those improvements include six electric rubber tire gantry cranes at its South Florida Container Terminal (SFCT); expanded reefer yards; the Deep Dredge Project, which increased channel depth up to 52 feet; the Port Tunnel to the interstate highway system and daily on-dock rail service. The improvements at SFCT alone increased terminal capacity by 38%. PortMiami will likely see even more growth in the coming years with the construction of a \$57 million temperaturecontrolled warehouse that Olafson says will attract refrigerated traffic that normally goes to Philadelphia.

"Florida has the market to support large growth in produce imports because it's one of the fastest growing states in the United States," Olafson says. "Add to that the port's proximity to key produce markets and PortMiami is a natural gateway for perishables. We can put a reefer on a truck or train at PortMiami and it can reach 70% of the United States within one to four days, poising the port for expansive growth in refrigerated cargo."

containers to China to protect the strong outbound demand for Chinese produced goods.

Dreisbach notes that the Port of Oakland is holding on regarding refrigerated container shortages. "We've seen some tightening of availability on specific steamship lines, but we are faring better than the Midwest and the intermodal side where they are being transited inland to Chicago and Kansas City," he says. "But that is also pushing more product to the West Coast to access those containers"

Some Relief

The demand for goods is expected to continue throughout 2021, stimulated by the disbursement of additional stimulus checks to citizens in the United States. Industry experts project steamship rates to somewhat normalize Q3 2021, but rise again in Q4. While port congestion should improve this summer, Burke maintains the congestion and container shortages will probably get worse again in late fall when shippers face the surge of imports ordered for the holiday peak season.

Meanwhile, changes in steamship line rotations are currently on hold while carrier executives are trying to make asset adjustments to address supply chain dynamics and issues caused by the Suez Canal blockage. Most steamship lines are now employing entire fleets to move shipments and reposition empty containers.

"Vessels that were considering altering ports or routes have stayed in their scheduled port calls," says Frank Plant, President, Harborside Refrigerated, which operates frozen, refrigerated and dry warehouse space in San Diego, California. He notes the Port of San Diego has experienced some disruptions due to COVID-19, but no congestion, because it primarily services South and Central America. Plant adds that his company has adequate capacity to accommodate growing perishable imports. "I believe we currently handle shipments faster than most ports. The emphasis we are seeing is on paperless transactions and truck turnaround. Reduced road traffic has made scheduling trucks more reliable."

Port improvements also help with efficiencies. The Port of Oakland, for example, just installed three new cranes – the tallest in North America. "Those cranes are going to help us deal with larger vessels more effectively," says Dreisbach.

In addition, the Port of Oakland will be the first port call on container transportation and shipping company CMA CGM's new service from Asia. "This will give us better container availability, especially on reefers from Asia for our export products," Dreisbach says. "We are scaling our fleet of drivers and tractors to meet the export demand."

Increased Volumes

Other seaports around the United States also are seeing increases in container volumes. But congestion is not a problem at U.S. East Coast and Gulf ports, although some congestion is occurring.

At the Port of Baltimore in Maryland, volumes have rebounded since last year predominately due to a shift in cargo from the U.S. West Coast to U.S. East Coast. MTC Logistics operates a warehouse facility close to the Port of Baltimore. MTC Logistics also operates an international temperature-controlled distribution center at the Port of Mobile in Alabama, also an export port.

Janson says that MTC is looking to automate wherever possible, expand operations and partner with terminal operators and ocean carriers to drive efficiencies. He maintains that continued shifting of cargo by Beneficial Cargo Owners (BCOs) to U.S. Gulf



Port of Rotterdam, Netherlands. (Photo courtesy of Port of Rotterdam Authority/Eric Bakker.)

BREAKING IN BREXIT

The beginning of 2021 marked a new relationship between the United Kingdom and the European Union. Brexit became official, and Customs and food inspections on import product from the United Kingdom began immediately. At first, volumes were relatively low with companies building safety stock. In February, however, volumes began increasing and continued into March.

From the start, Netherlands-based Eurofrigo, with its food inspection points at the Port of Rotterdam, had operators in place to work seven days a week. Customs and food authority document processing is the biggest challenge to Brexit. "While many companies did a lot of preparation, having all documents prepared upfront, prior to shipping, is a new process for many," says Jeroen Tempels, Managing Director, Eurofrigo.

Eurofrigo had an advantage since it has been handling deep-sea volumes at the Port of Rotterdam for decades and was already familiar with doing business with the United Kingdom. This is not the case for every operator.

"Lead time from shipment to arrival for deep sea is around three weeks," Tempels explains. "Short-sea volumes (U.K. to EU) prior to Brexit were delivered on the same day."

Starting in January 2021, under Brexit it became essential for documents to be processed very quickly in order for shipments of fresh products be delivered in the shortest timeframe to their final destination. New documentation preparation for imports into the United Kingdom from the EU, however, are not yet in place. The U.K. government originally scheduled for companies to have documentation ready on April 1, and border inspections to begin on July 1. This has been postponed to October 1, 2021, and January 1, 2022, respectively.

"Although the United Kingdom is quite dependent on the EU mainland for food import, there is less infrastructure in cold stores in the United Kingdom," Tempels explains. "That is because prior to Brexit, deliveries into the United Kingdom from the EU mainland could be delivered same day to supermarkets. For export, there is still a lot of preparation needed."

Complicating matters, the industry has been facing a reefer shortage compounded by supply chain disruptions caused by the pandemic. But having timely processing of documents to get shipments to their final destination remains a concern for many companies. Looking forward, however, Eurofrigo will continue working closely with customers, partners, Customs and the Dutch food authority.

"We already see document handling being processed in a shorter timeframe," Tempels says. "And as of mid-2021, there will be a new Eurofrigo Cold store at the Port of Rotterdam, including a new border inspection point." and East Coast ports will relieve congestion for West Coast ports. He adds, "Building international refrigerated DCs closer to ports reduces turn times for port-centric truckers."

As a result of expansion and acquisition activity over the past few years, Americold now operates an extensive network of portside facilities around the world. "By working closely with our customers to identify market demand, we have increased needed capacity near ports," Schwefler says. For example, in 2020 Americold opened a new export and import facility at the Port of Savannah, Georgia.

Americold also has capabilities to help the import and export community work through challenges to get product flowing through ports. "Some of these solutions include diversion of product to alternative ports, employing rail or intermodal activity to manage costs during overflow periods, holding or forward deploying products at inland facilities or offering value-added product transformation for customers to repurpose inventory to alternative channels," Schwefler says.

Overall, the future looks bright for temperature-controlled sea transportation of

A PORTSIDE VIEW FROM THE DR

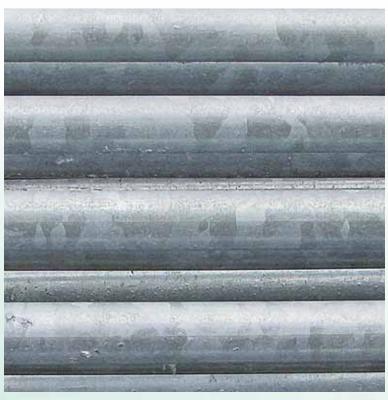
"More and more climate-controlled warehouses want to invest in technology in order to maintain an automated system that allows them to manage virtual and physical inventories more efficiently, such as installing different sensors for product traceability, among others, says Salvador Figueroa Sanchez, Director, CLC -Colsultores Logisticos del Caribe Dominican Republic. "In addition, the use of digital platforms, such as blockchain, digitization, nanotechnology with microsensors, and robotics will, in due course, have a great impact on logistics."

Looking to the future, Sanchez says the maritime cold chain and portside 3PLs will experience greater development and growth as a result of greater demand for quality. "In addition, because of the COVID-19 pandemic, the governments and business sectors of many countries have seen firsthand the importance of the cold chain and temperature-controlled warehouses," Sanchez points out. "They preserve the local production of perishable products and local exports, as well as the continuous supply of imports from abroad, both by sea and by air."

Sanchez adds that governments and the business community know in order to maintain the food supply chain for the population, they must have an efficient supply of food. "That will happen through the adoption of best practices in the management of the cold chain and logistics to ensure food sanitary safety and product quality," he says. "The increasing growth of global quality requirements for perishables means that ports have to maintain the quality of their port services through the construction of climate-controlled facilities in order to maintain their cold chain. In turn. 3PL operators, suppliers and commercial distributors that interact throughout the cold chain ensure that the products they handle arrive in the best conditions and quality, at the points of consumption."



Port of Mobile, Alabama, United States. (Photo courtesy of MTC Logistics.)



EVAPCO Pass-Protect Passivation Solution



White Rusted Coil without Pass-Protect

Passivation – We Have the Solution.

EVAPCO's **Pass-Protect Passivation Solution** is the first of its kind solution featuring a 2-step process that will improve the outcome of galvanized coil passivation and minimize white rust on evaporative condensers.

Step 1: EVAPCO's Passiv-Assist is a proprietary factory pretreatment applied to the heat transfer coil that enhances the speed and effectiveness of properly executed field passivation, including units requiring immediate heat load.

Step 2: Site-specific field passivation service includes EVAPCO inhibitor chemistry, feed and control equipment and routine service by Factory Authorized Water Treatment Partner.

No mater your application, EVAPCO's **Pass-Protect Passivation Solution** is suitable across a broad range of makeup water qualities and provides improved passivation RESULTS.

Visit **evapco.com** to learn more.



An Employee-Owned Company Since 1976

Commercial HVAC | Process Cooling | Industrial Refrigeration | Power



Port of Wilmington, North Carolina, United States. (Photo courtesy of Port of Wilmington Cold Storage.)

food products and for portside temperature-controlled warehouses.

"This will only continue to grow as the buying public realizes that frozen cargo stores well and without product degradation," Janson says. "Also, as BCOs continue to increase product sourcing from offshore suppliers, economical sea transport makes sense."

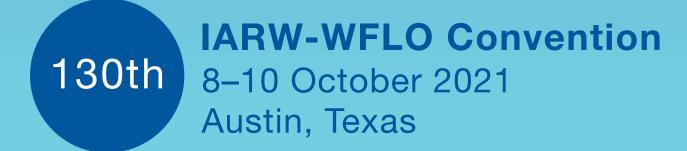
Other ports, such as the Port of Wilmington, North Carolina, also offer alternatives to cold chain shippers.

"There is more than enough temperaturecontrolled space in North Carolina, particularly in the eastern part of the state, which includes the port," reports Chuck McCarthy, President, Port of Wilmington Cold Storage (PWCS). "And the North Carolina Ports Authority (NCPA) has long-term plans to grow its refrigerated/frozen goods sector. This includes attracting additional steam lines, additional ports-of-call and infrastructure improvements," he says. "We are the only cold storage facility at the port and are part of NCPA's long term strategy." @

KAREN E. THUERMER is a freelance writer based in Alexandria, Virginia, who specializes in economic and logistics issues.

EMAIL: kthuermer@aol.com

DELIVERING VALUE



EDUCATION AND NETWORKING

REGISTER TODAY!





Core Partners of
GLOBAL COLD CHAIN
ALLIANCE®

Learn more at gcca.org/convention



WHEN TO AUTOMATE

Automating a system or process is a big decision – here are some factors to consider.

By Alexandra Walsh

he business case for optimizing efficiencies by automating temperature-controlled warehouses is stronger than ever.

If the right fit, automation such as palletizers, automated storage and retrieval systems (ASRS), conveyors, automated picking solutions, automated guided vehicles (AGVs), autonomous mobile robots (AMRs) and automated truck loading/ unloading systems can be highly beneficial from the standpoint of labor, safety, food quality, throughput and traceability.

However, as many 3PL providers operate on one- to three-year contracts with customers, making automation decisions can be difficult. Automation investments made for one customer may not work for another customer. This could lead to costly and unjustifiable retrofitting or other workarounds. "Automation is not a one-size-fits-all solution," emphasizes Don Schoenl, President and CEO of Agile Cold Storage. "There are applications where we need 120-foot-high fully automated, no lights/low oxygen facilities, and in another circumstances, a semiautomated building or a conventional cold storage warehouses works."

Considerations

Schoenl believes there are two primary criteria to consider when deciding whether to add automation or robotics to a particular operation. "First, how will it help meet your customers' requirements? Second, what is the availability of qualified labor in your market?" "While much of the spotlight and media focus is on dotcoms and e-commerce today, the cold storage industry is really on the leading edge, technologically speaking. With fewer and fewer people wanting to work in a frozen environment, the drive to automate while minimizing a facility's environmental impact has never been greater.

In the future, being able to fulfill case level orders automatically and economically will have the biggest impact. These types of orders are the most labor- and process-intensive to fulfill. Furthermore, the volume of case level fulfilment in the chilled and frozen foods sectors continues to grow rapidly." Victor Hoerst, Stoecklin Logistics

Stoecklin Logistics supplies automated storage and retrieval systems and shuttles, along with controls and software solutions to manage these systems. "Automation/robotics excites us as it will be the 'new normal' in the cold storage industry. It addresses and optimizes labor scarcities and ergonomics, energy efficiencies, picking accuracy, product and data quality and omnichannel capabilities. There is no way around automation if you want to operate successfully in the future. The biggest impact on warehouses in the future will be shuttle systems as they are the perfect combination of performance and storage density, and can be applied in buildings with different heights." Chad Zollman, TGW Logistics Group

TGW is a systems integrator and MHE supplier including robotics, shuttles, miniloads, conveyors and depalletizers and palletizers.

Another consideration is the volume of activity the operation requires, says Schoenl. "If it happens one month or a year verses 10 times a day, you might think differently about automating that operation. However, that should not stop you from investigating where automation could be beneficial – do not wait to do all or nothing."

Bruno Vargas, Operational Manager at Iceport, a portside temperature-controlled warehouse in Brazil with automated stacker cranes and conveyor tables, says, "The decision to automate our facility was because we want to attract loads with high turnover and we have to have handling capabilities beyond our competition, but with less allocated labor."

Commenting on the construction of a 92,000-pallet-position, fully automated expansion to an existing Lineage Logistics facility in Peterborough, United Kingdom, Daniël Walet, Operations Research Scientist at Lineage, says the reason for choosing to automate in the expansion is twofold. "By using automation, we achieve the storage density, and therefore the corresponding energy efficiency, that we are otherwise unable to achieve in a conventional warehouse," Walet says. "Given that the warehouse is so cold, finding people that want to work in these environments is difficult. However, our operations in the cold chain are necessary to make sure that people are able to buy groceries."

5 REASONS TO AUTOMATE

There are many reasons why a company would undertake the automation of a process or system in their facility, says Elliott Wolf, VP & Chief Data Scientist at Lineage. Here are five.

- Labor shortages. It is extremely (and progressively more) difficult to find folks who want to drive a forklift in a freezer. Those that are willing to do so are heroes to the supply chain, but it is hard to find people willing to drive material handling equipment in a freezer.
- Safety and ergonomics. The disassembly and movement of pallets is physically taxing requiring an employee to bend down or strain to lift heavy weights. This process is much more comfortable for a robot.
- Robotics are predictable and see less variation in their outcomes, and the net result is vastly higher utilization.

- 4. Robotics remove constraints on material handling. For example, a forklift (not attached to the floor or ceiling) can only reach so high before its center of gravity is in danger of falling over. A robotic crane, however, can reach arbitrarily high without danger of falling over. The net result is the building can be three to four times as tall as a structure with manual operations.
- 5. In the refrigerated sector, robotics help save energy because the greater packing density increases energy efficiency. Robotics in freezers allow fewer and smaller penetrations into the storage area – a door into a robotic freezer needs to allow access to transmit a pallet, while a door into a manual freezer needs to allow access to a forklift as well.

A Bridge

Walet explains the automated part of the Peterborough facility is the storage and retrieval function. "Any case picking activities will be completely manual as well as the loading part. For unloading, this facility will be equipped with an automatic truck unloading system, allowing the truck to be automatically unloaded within a few minutes." He adds, however, that function requires special trucks, so the use of this technology is limited and all other unloading is still done manually.

"An early automation to consider would be conveyors, providing they are a cost advantage and can go from point A to point B and back again," says Schoenl. "After that, technologies to look at are AGV forklifts that can move from point A to B to C to D in place of a forklift or pallet jack operator – that can really be a bridge to automation."

Schoenl says the next step up is a big jump – pallet hoteling or storage systems that mimic the deep-lane bays of fully automated warehouses.

"Software, AI and data will drive the technology that will include end-to-end solutions to handle pallets, cases and each picking. The software will also provide more effective operations over an enterprise network and will be interconnected to upstream manufacturing, retail distribution outlets and to the end consumer. AI will provide the next level of smart forecasting, capacity planning and labor optimization. Additionally, more direct to store and direct to consumer functionality will be pushed toward the cold chain operators. This functionality will create a need for more labor and added costs. Automation will provide a means to offset the need for labor, reduce costs to your customers and improve customer satisfaction." Tom Swovick, Dematic

Dematic supplies storage and retrieval systems, automated guided vehicles, case handling mini-loads and shuttles, automated mixed case pallet fulfillment systems, as well as layer picking solutions. "In the past few years, we marveled at same day delivery of items purchased online. In the future robots will assemble a meal kit and deliver it to the customer within an hour. You will order dinner on line from a grocery store or restaurant. A local automated cold storage facility will process that order and make it available to either pick it up on the way home or have it delivered to your location. Think of a local grocery store repurposed as a cold storage assembly operation that can supply a single meal or item with the same speed and efficiency we now use to move full cases of product. Next day deliveries will be ancient history!"

Tim Osmulski, The Raymond Corporation

The Raymond Corporation manufactures a variety of automated and operator assist technologies for temperature-controlled warehouses including automated lift trucks and AS/RS systems.

Underserved

Case picking in cold storage warehouses is underserved by automation in both the United Kingdom and the United States, notes Walet.

"The challenge of automating case picking, and automation in general, is to build a solution that is robust enough to handle drastic order demand changes, like those associated with the pandemic, in addition to the traditional volume peaks, such as during winter holidays," Walet says. "Today, automation/ robotics is not flexible enough to scale up as easily as with seasonal labor – and these types of warehouse scenarios would benefit from more advanced automation."

Vargas believes the docking process for vehicles would be more efficient with automation. "Our idea is that in the not-toodistant future, we can use platforms for the containers in the dock instead of vehicles, which would bring savings and safety to the operation."

The Promise

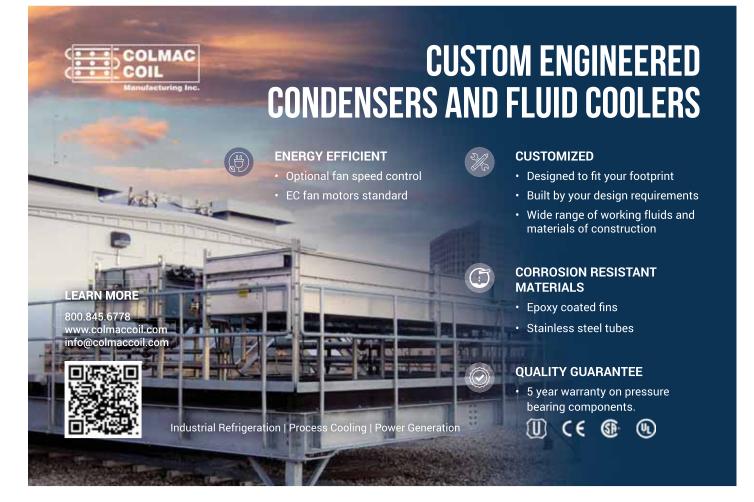
What is the most exciting thing today about automation?

"We crossed that threshold of reliability and redundancy and automation is a proven commodity – we are not dealing with start-ups," says Schoenl.

"Traceability is total – 100%. There are no allocation errors, everything is indicated in the system, and the pallets are automatically directed," Vargas says. "And speed – we can lower a full load for shipping at the dock in 8 to 10 minutes."

Walet says the most exciting part about their work with robotics is ensuring that manual labor and robotics work in harmony with one another as more automation is introduced to their facilities.

"Robotics will not fully replace manual labor in the cold chain as humans are still more efficient at certain tasks in the warehouse," Walet notes. "They can complement each other, but only when both are managed



"With over 100 installations inside freezer warehouses, our clients keep pushing us on ways to improve the performance and reliability of our equipment and we believe the current technology affords us that ability. I believe warehouses of the future have be the ability to handle a larger variety of product sizes for piece picking and the ability to enhance ground level horizontal transportation in and out of the freezer environment." Fred Grafe, Automha

Automha supplies a semi-automated carts and automated pallet movers.

in the correct way, through the right software (WMS/WCS) and the corresponding algorithms. Building the software stack to manage that relationship is what excites me the most about automation."

Tomorrow

For 3PLs that have yet to automate, Schoenl says they should be investigating automation options now and determining when that threshold of cost and reliability is there. "Automation needs to happen, but there can be degrees of automation – it is scalable. Just because you can't be fully automated does not mean you should do nothing at all. If you take that route, you won't be in business in the future."

In 15 years, retrofitting existing conventional buildings will be impacting the cold chain the most, according to Walet.

"The global cold chain is a growing market, but only a small percentage of this market is automated, which means the biggest part still consists of conventional warehouses," Walet says. "As AGV technology gets more mature, and more robust in its ability to work in a cooler/frozen environment, it will have the biggest impact on the cold chain. It's using existing real estate, but applying new technology to increase cold chain efficiencies." **@**

ALEXANDRA WALSH is a Senior Publishing Consultant with Association Vision and Editor-In-Chief of COLD FACTS.

EMAIL: awalsh@associationvision.com



Premium Quality Construction Services Ground up - Expansions - Renovations - <u>Repairs</u>

o'connor construction group

(817) 632-3553 info@ocgbuild.com

173 County Road 3850, Poolville, TX 76487 www.ocgbuild.com

Cold Storage Commercial Real Estate

BROKERAGE | ADVISORY | FINANCING | RESEARCH

2021 U.S. Industrial Investment Outlook

Commercial Real Estate 2021: Adapting to the New Normal; Trends, Insights and Outlook for Industrial Investors



- 112-page report featuring graphs, graphics and metro-level data tables
- Features "Big Picture" economic and real estate outlook
- Featuring: Hospitality, Industrial, Multifamily, Office, Retail, Self-Storage and Seniors Housing
- 20-page versions focused on each individual property type coming soon

Email luis.ortega@marcusmillichap.com to receive this complimentary report

WILLIAMS INDUSTRIAL GROUP

Marcus & Millichap

Kent R. Williams, SIOR Senior Managing Director Investments Direct: 858.373.3193 kent.williams@marcusmillichap.com License: CA 00823860



Luis Ortega Cold Storage Specialist Direct: 858.373.3214 luis.ortega@marcusmillichap.com License: CA 02071282



Vince Krantz Airport-Served Specialist Direct: 858.373.3180 vincent.krantz@marcusmillichap.com License: CA 01976199



Pablo Ortega Rail-Served Specialist Direct: 858.373.3168 pablo.ortega@marcusmillichap.com License: CA 02100280



Shawn Arnett Fiber Lit Specialist Direct: 858.373.3207 shawn.arnett@marcusmillichap.com License: CA 02080620



Matt Taylor Crane-Served Specialist Direct: 858.373.3179 matt.taylor@marcusmillichap.com License: CA 02105908



Tino Acuna Incubator Space Specialist Direct: 858.373.3139 tino.acuna@marcusmillichap.com License: CA 02101557



Fred Copley Manufacturing Specialist Direct: 858.373.3234 fred.copley@marcusmillichap.com License: CA 02141490

Contact Us For Our Current Inventory

Marcus Millichap

858.373.3100 | www.marcusmillichap.com | NYSE: MMI Marcus & Millichap is a service mark of Marcus & Millichap Real Estate Investment Services, Inc., © 2021 Marcus & Millichap. All Rights Reserved.



HR LEGAL AND REGULATORY CONCERNS

Four issues offer challenges and opportunities for the cold storage industry.

By Sheryl S. Jackson

reativity, innovation and flexibility were important words in 2020, as cold storage human resource leaders quickly changed plans, processes and in some cases, policies, to keep employees safe and on the job to ensure that essential services provided by their companies continued to operate.

With the "pandemic year" behind everyone and vaccinations and a return to normal life on the horizon, it is necessary to look ahead at issues facing HR professionals in coming years. In "2021: The Year Ahead for Employers," experts take a look at trends, legislation, regulation and litigation that might impact employers.¹ Four of those issues include benefits and leave policies; diversity, equity and inclusion; immigration policy changes; and a potential increase in minimum wage.

Health Measures, Benefits and Leave Benefits and leave policies were evaluated closely during 2020 to ensure employees had the time and health coverage needed for illness, family issues or quarantine requirements following exposure.

"Throughout 2020, we were flexible with our personal time off (PTO) and we will continue to be flexible to allow our associates to care for themselves and their families," says Lisa Chasey, Vice President of Compensation and Benefits at Americold. Although benefits and leave policies will not change in 2021, she does say there will be an adjustment as the company and team members handle what "going to work" looks like, especially those who worked remotely.

Not only does technology support a remote workforce for some positions, but team members who come into the workplace will probably continue some of the health protection activities adopted in 2020, such as handwashing, social distancing and wearing masks, Chasey adds.

While some companies in the United States and Canada chose to raise wages for their essential employees during the pandemic, Canadian-based Congebec approached financial benefits for workers differently. The extra \$2 per hour paid by some Canadian companies presented two challenges that Congebec wanted to avoid: the negative perception that working in cold storage was hazardous during the pandemic and warranted hazard-pay, and the negative effect of taking away the extra pay once the pandemic is in the past.

"Once you add an hourly increase, it is difficult to remove," says France Pomerleau, Vice President of Human Capital and Communications at Congebec. Instead of a "temporary" wage increase, Congebec created "care measures" that were \$250 payments to each employee to supplement their wages. "Two payments, one before the summer of 2020 and one early in 2021, were designed to help employees with pressures at home such as a spouse not working," she explains. "Our employees were grateful because they appreciated that we acknowledged that they may need help outside work and we wanted to support them."

A COVID-related issue that employers may face in the upcoming year is COVID vaccinations, says David Mohl, a Principal in the Atlanta, Georgia, office of Jackson Lewis, GCCA's employment law service provider. "COVID vaccinations present a number of issues for employers to navigate, including whether to encourage or require employees to be vaccinated, how to manage time off should employees be unable to work due to any vaccination side effects, and whether and how to offer employee incentives for employees who get vaccinated," he says.

Human Resource leaders will also have to determine how to handle disability or religious accommodation requests that employees may raise in the event vaccination is required. "This is a dynamic and evolving area where the law continues to develop as the pandemic progresses," Mohl adds.

Pomerleau points out that her company's issue with vaccinations differs from U.S. companies. "Americans are receiving vaccines much faster than Canadians, in fact, none of my workforce is currently vaccinated, and we don't anticipate them receiving vaccines before the summer," she says. The high level "In Quebec, the minimum wage is under \$15 but our company's minimum is \$19 per hour because we require employees to hold certifications for different positions, such as forklift driver, and the higher wage is needed to attract employees to cold storage jobs."

FRANCE POMERLEAU, Congebec

of stress associated with multiple surges of the virus, along with the existing difficulties finding employees, will continue to make staffing difficult, she adds.

Diversity, Equity and Inclusion

With an increasing emphasis on diversity, equity and inclusion (DEI) throughout society, it is critical that HR professionals strive to create an environment where all different kinds of people can thrive and succeed, says Michelle Phillips, a principal in the White Plains, New York, office of Jackson Lewis, who advises employers on promoting an inclusive workplace. She recommends strategies that include expansion of employee resource groups, mentorship programs and diversity champions to ensure that traditionally excluded individuals or groups have equal access to opportunities and resources.

Burris Logistics' mentorship program was established in 2019 to retain talent and develop leaders within the company, and a key focus is reaching out to individuals of all ages, genders, races, and socio-economic and cultural backgrounds who do not typically volunteer for opportunities, says Laura McCann Ed.D., SPHR, Director of Talent Management. "We also share career stories of our senior leaders, trainers and managers whose stories might trigger some recognition in our diverse groups – leading them to realize that they can pursue and be successful at different positions in the company," she says.

"Our frontline employees are a diverse group, but the mentorship program is one way we are improving our pipeline of diverse future leaders," says McCann. Position openings are posted on job boards seen by a variety of different audiences, including historically Black colleges and universities, she adds.

Like many companies, Burris also offers employees an opportunity to further their education with a tuition reimbursement program. However, the company found there were employees who wanted to participate but did not have the funds to pay for tuition upfront, which limited access to the benefit. "We changed the program to pay for employees taking courses online through our partnership with the University of Arizona upfront and have already had six people participate," says McCann. To qualify for the program, employees must have one year of full-time employment at Burris and continue employment for two years. "We also added a discount for family members of our employees to encourage others to continue their education."

Americold's strategy for DEI is continually evolving and includes a variety of policies and cultural norms, including encouragement of behavior to promote inclusion and access for all individuals, says Chasey. "We have antidiscrimination policies and we are providing additional training to help employees and managers recognize unconscious bias in the workplace," she says.

The company also conducted a pulse survey that asked employees to share their ideas for improving the work environment at Americold.

One of the policy changes resulting from responses to the survey is the addition of two floating holidays that employees can use to celebrate any days important to their family, culture or religion in addition to the standard, company-wide holidays. The day away from work must be approved by a supervisor as any PTO would, but the additional holidays are a sign of respect and recognition of employees' different needs, says Chasey. "Our company values promote inclusion and we do not tolerate harassment of any individuals or groups, says Pomerleau. While she admits that they are always looking for more women to work in all areas of the company, she says they celebrate the number of countries and beliefs their employees represent. "A posting on Facebook shows the success of our inclusion efforts by showing over 40 flags representing our employees' countries of origin as well as flags such as the LGBTQ+ flag."

Immigration Policies and Issues

"As business and industry return employees to the workforce, we anticipate that ICE, the U.S. Department of Homeland Security's enforcement division, will return to worksite investigations to include I-9 compliance, E-Verify monitoring and verification that employers are not employing unauthorized workers," says Maggie Murphy, Office Managing Principal for the Austin, Texas, office of Jackson Lewis, and a specialist in workplace immigration law. "ICE had to shut down its onsite investigation activities last year, so we expect them to be back in full force by the second half of 2021."

If employees were hired "remotely" or "virtually" because the worksite was closed due to COVID-19 restrictions, those records must be reviewed, and certain protocols must be followed to make sure the employee's documents are checked upon their return to the workforce, she recommends. "If a foreign national worker's documents expired during a forced shut down, their documents must be updated upon return to work, and E-Verify employers should run reports to make sure that E-Verify was run for new hires."

In addition to maintaining and updating foreign national worker documents, the best course of action is to stay updated on new policies. "We will continue to monitor changes to immigration policies to see how we can best support our current associates," says Chasey.

Potential Minimum Wage Increases

Although an increase in the U.S. federal minimum wage will most likely not affect the majority of cold storage companies, it is important to monitor the issue. "The dynamic of our industry is a constant adjustment to offer competitive wages to attract talent, which means our wages are often already over the minimum wage proposed," says Chasey. "An increase would have minimal impact on our company."

"A minimum wage increase would not be a heavy lift for us," says McCann. "We continuously monitor pay studies to make sure we are competitive."

Companies that have national operations that span multiple states and cities will have to



continue monitoring state and local level wage mandates, says Justin Barnes, Attorney, in the Atlanta, Georgia, office of Jackson Lewis. "Efforts to increase minimum wages at the local level stemmed from a lack of increase at the federal level, but while a federal minimum wage increase could increase uniformity, it is likely that it would not be high enough to eliminate all local mandates."

There is no national federal minimum wage in Canada, but each province sets its own minimum wage, says Pomerleau. "In Alberta, the oil and mine industries drive the economy, which means wages are higher in the province than others," she says. "In Quebec, the minimum wage is under \$15 but our company's minimum is \$19 per hour because we require employees to hold certifications for different positions, such as forklift driver, and the higher wage is needed to attract employees to cold storage jobs." "I encourage businesses to find a reputable source for minimum wage increases and review that data in comparison to the company's existing wages to evaluate the impact an increase at the federal level would have on their businesses," says Barnes.

Monitoring minimum wages, immigration policy changes, DEI initiatives and benefits along with the myriad of other issues facing HR professionals in the coming year may seem like a daunting task, but Chasey has a positive take on the experience of 2020 and the challenges of 2021.

"We had a wonderful opportunity in 2020 to think outside the box and come up with meaningful practices that improved our companies," points out Chasey. "By staying on top of issues facing us in the coming year, and evaluating their effect on our businesses, we can continue to have a positive impact on our companies and our employees' lives."

Utility REBATE Eligible

Reference:

"2021: The Year Ahead for Employers." Jackson Lewis P.C. https://www.jacksonlewis.com/ publication/2021-year-ahead-employers @

SHERYL S. JACKSON is a freelance writer based in Alpharetta, Georgia, who specializes in industry issues and trends.

EMAIL: sherylsjackson@bellsouth.net

FASTER AT AN

SMARTER

- Freezing Profiles
- Occupancy Sensing
- IoT Data Logging
- Remote Control

No matter how large or small your freezing, cooling, or tempering operation, we can configure the system to do the job. The QFM system installs quickly into your existing racking and we can have your operation running within as little as one week.

QUICKFREEZE

THE FASTEST WAY TO FREEZE A PALLET



Fort Wayne, IN 46818 • (260) 234-2151 www.QuickFreeze.com





CASE STUDY

BUIL

CONNECTING RAIL AND SHIP IN OAKLAND

Fisher Construction Group finds success with Lineage Logistics Cool Port design/build.

By Keith Loria

ineage Logistics Cool Port in Oakland, California, United States, is a new temperature-controlled transload distribution facility that is a cornerstone project of an economic revitalization plan developed by a public-private partnership between Lineage Logistics, cold storage operator Dreisbach Enterprises and the Port of Oakland.

Fisher Construction Group was hired to design and build the mammoth \$70 million property on 22 acres.

The 276,000-square-foot facility bridges the gap between rail and ship and provides a greatly needed cold storage and transfer hub for importing and exporting protein products between the United States and Pacific Rim nations. Lineage Logistics Cool Port is projected to handle approximately 9,000 rail cars per year and an additional 9,000 containers by truck, transferring up to 1,000,000 tons of perishable product through the Port of Oakland annually. Ryan Smith, Senior Project Manager for Fisher Construction Group, noted the company became involved in the project when the Port of Oakland issued a request for proposal, and Fisher was selected to team with the Cool Port Group (comprised of Lineage Logistics and Dreisbach Enterprises) as its builder.

Being the first public/private partnership project for the Port of Oakland, Fisher's project management team navigated many "firsts" for the port. Cool Port's ownership group trusted Fisher's management team to navigate and advise them through the process.

"Time and budget were the two biggest driving factors," Smith explains. "Because of reasons to do with the lease, the facility had to be operational by November 2018 – regardless The Lineage Logistics Cool Port, designed and built by Fisher Construction Group, bridges the gap between rail and ship and provides a cold storage and transfer hub for importing/ exporting perishable products between the United States and Pacific Rim nations. (Photo courtesy of Fisher Construction Group.)

of whether it was working or not, they were going to start being charged rent."

In addition, there was a concurrent federally funded project to get rail lines in place, and Fisher needed to meet certain milestones and dates to allow that rail service project to be installed.

"There's also a lot of public involvement working in the Port of Oakland," Smith says. "The Maritime Aviation Port Labor Agreement requires using local unions, so we could hire from five zip codes in the Oakland area. Fisher hired a person to specifically administer the requirements."

Once port staff reviewed and endorsed the project, the port's commissioners still needed to provide final approval of the entirety of the plan including utilities, grading, environmental, trucking haul routes and construction reviewed and approved.

Constructing the Cold Chain

The facility contains a 100,000-square-foot storage zone that represents about one third of the entire space. The rest is comprised of a uniquely winged refrigerated loading dock, allowing for product transloading in optimal conditions.

Smith notes the 108 rail and truck doors in the refrigerated cross-dock were designed with a complex set of interlocks to help maintain the cold chain.

"The rail doors remain locked until the trains are completely aligned with the inflatable dock seals and adjustable rail levelers are in place," Smith says. "The interlocking system allows rail cars to be aligned four-deep with passage bridges fitted between cars. Loads are transloaded to trucks using specially designed truck levelers enabling the trucks to be fully loaded with product via handling trucks, without the need to hand-load the last stack in the area that a conventional loading dock would typically occupy."

Overcoming Challenges

Smith notes jurisdiction issues were the largest challenges the crew faced as working in California, in Oakland specifically and at the port, all had unique issues. Overall, there were about 20 different agencies from which Fisher needed approval. On the construction side, horrible soils were the problem.

As the site was once an army base located on the tidelands of Oakland Bay, it presented some challenges to Smith and his team. For one, there were unknown sunken hazards and potential contamination in the already soupy tide flats.

Smith explained the poor soils required the facility to be built on 1,800 concrete piles driven 50 feet down to counteract settling and seismic activity, bracing the building's slab foundation.

"If there ever was a seismic event, it was estimated the ground underneath could slip away up to two feet," Smith points out. "We had to design with that in mind, so we built it almost like a bridge deck sitting on top of piers and it's all a structural slab."

That required all utilities coming in to have big joints and flexible connections and all underground utilities (electrical, plumbing) had to be set in concrete with hangers. Additionally, the land is heavily regulated by the California Department of Toxic Substance Control due to the possibility of ground contamination so specific site permits and approval was required by the DTSC to proceed with the work, such as obtaining groundwater permits for the discharge of construction dewatering efforts from The East Bay Municipal Utility District.

The Fisher team also created a hinge detail for the truck aprons so if the ground erodes, the top would still be connected to the building as the aprons would tilt in the event of settlement. Trucks would have access to the docks via the use of this teeter-totter design counteracting settlement.

Notable Innovation

The Cool Port project adopted a locally driven strategy when devising its long-term international solution and its localized strategy was woven into every aspect of the enterprise.



Two thirds of the entire facility is comprised of a winged refrigerated loading dock, allowing for product transloading in optimal conditions. (Photo courtesy of Fisher Construction Group.)



One hundred and eight rail and truck doors in the refrigerated cross-dock were designed with a complex set of interlocks to help maintain the cold chain. (Photo courtesy of Fisher Construction Group.)

The success of the Lineage Logistics Cool Port project required significant innovation long before the first excavator arrived onsite and throughout the project's entire designbuild process.

Smith notes that innovation is evident in the way the company future-proofed the methane-pocketed and seismic-prone land to a suitable building foundation; how it devised on-demand market adaptability in the form of interchangeable frozen and chilled storage spaces; and how it maximized end-to-end cold chain efficiencies within an intermodal system.

"While the advantages of intermodal transport are well known, less well known is the need for continuous improvement of the cold chain itself," he says. "Every link in the chain carries the risk of breaking the chain and risking safety, quality and value along the way."

The Cool Port design mitigated the likelihood of weak links by creating continuous cold chains capable of safeguarding all goods entering and exiting the building. "Neither loading nor unloading breaks the chain when utilizing inflatable rail dock shelters and internal setback dock pits with cold chain safeguards," Smith says. "Frozen or chilled, the process remains intact and cargo is never exposed to external temperatures."

Cool Port's continuous cold chain intermodal transport facility is augmented by the structure's innovative cold chain storage capabilities. The structure houses an 80,000-square-foot freezer in tandem with two 10,000-square-foot areas capable of storing goods with a temperature range of -10F to +35F.

"Such convertible storage spaces accommodate the dynamic realities of market demand," Smith says. "This innovation reduces the facility's limitations, thus increasing its functionality in an evolving market."

Being a freezer and a cooler, Smith notes there is always a bigger demand for water. Originally faced with a \$2 million connection price, Fisher was able to negotiate to get it down to a manageable cost. That was a battle that took six months, Smith adds.

Sustainable Efforts

The design, construction, and operations of Cool Port met all of CALGreen's codes – the statewide standard for reducing the environmental impact of construction by minimizing waste and setting a high standard of energy efficiency for new buildings.

"The building is certainly very efficient thermally," Smith says. "We used all the latest technologies for the thermal envelope."

The whole building is also solar-ready if solar was to become available. There are dedicated dead loads for solar panels on the building, extra room in the electrical gear, and extra conduits for other solar provisions.

Smith notes that given cold storage facilities are intensive energy users, it was in everyone's interest to increase the efficiency of the facility through smart use of materials and technologies. Therefore, the steel-supported 48-foot, 7-inch-tall cold storage facility is totally clad in energy efficient 6-inch IMP panels offering an R44 value, making it possible to maintain the freezer/convertible cooler with less than 2-degree fluctuation in energy consumption. Similarly, the cross-loading docks are clad in 4-inch insulated metal panels.

The facility's state-of-the-art industrial ammonia refrigeration system utilizes lowcharge direct expansion for all cooling loads, which significantly reduces the ammonia charge required on site. It provides additional benefits including the elimination of recirculation pumps, effective operation at multiple temperature levels, reduced defrost times and frequency, excellent response to changes in load, fast restart after a power failure, and simplified maintenance and operation.

Propylene glycol, circulating through compressor oil coolers, provides the heat for sub-floor warming under the storage areas, preventing ground frost formation. Meanwhile, Cool Port's control system manages all room temperatures and defrost cycles, providing a floating suction and discharge pressures that maximize electrical efficiency.

Final Thoughts

At the conclusion of the build, a formerly brown site riddled with challenges was transformed into a continuous blue-sky operation. Just as important, both temporary and evergreen opportunities were introduced into an economically distressed community.

"The Mayor of Oakland was at the grand opening, and multiple people in Congress came through, the Port commissioner was there, and everyone was happy with what they saw," Smith says. "It's a one-of-a-kind project. To have a facility where you can get fresh produce, meats and anything that needs to be refrigerated off a boat and put directly on to rail is unique."

Smith was pleased that the project met or exceeded all MAPLA goals as the first port/ public/private partnership in Oakland. He credits the joint effort from the beginning of the project as making it a smooth process for all involved. "We came away having a very successful project with all those parties," he says. "It was a very clear goal and we designed what was needed and what they wanted. We were on time and on budget and had the facility running when we had to."

The project was a finalist in the CEBA Built by the Best Competition in 2020. \bigotimes

KEITH LORIA is an award-winning journalist who has been writing for major newspapers and magazines for close to 20 years, on topics as diverse as sports, business and technology.

EMAIL: freelancekeith@gmail.com





Nominate your project today for the BUILT BY THE BEST AWARD!

Deadline to enter is August 15. For more details, visit WWW.gcca.org/builtbythebest Brought to you by CEBA, a Core Partner of the Global Cold Chain Alliance





MAY-JUNE 2021 · COLDFACTS 33

COLD CHAIN DEVELOPMENT NEWS ABOUT WFLO INTERNATIONAL PROJECTS

STRENGTHENING THE COLD CHAIN IN CENTRAL ASIA

This column features news about key projects of the World Food Logistics Organization (WFLO), a GCCA Core Partner, and its work with members, aid organizations and international development partners to help emerging economies and lower-income countries meet the challenges that arise when growing a safe and efficient global cold chain.

Since 2010, the Global Cold Chain Alliance has been involved in key projects throughout Central Asia.

Most recently, the GCCA and its members have supported the United States Agency for International Development's Central Asia Competitiveness, Trade and Jobs (CTJ) project, which operates in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The five-year project aims to facilitate exports and employment in horticulture and strengthen transport and logistics services across the five countries to develop a more diverse and competitive private sector and generate export-driven growth.

GCCA was tasked in 2017 with assessing gaps in cold chain sustainability in the region. The assessment provided recommendations and outlined specific actions, and some of those involving training and education have been implemented.

Initially planning for in-country training and site visits, GCCA switched to remote training in 2020 in response to pandemicrelated travel and safety restrictions. Lending their time and expertise, a number of GCCA members led virtual short courses on cold store operations.

Malsag Archakov, Head of Distribution, HAVI Kazakhstan, says, "The number one knowledge gap for cold store operators in Kazakhstan and the greater region is a lack of proper training, as well as control, in complying with food safety rules. Often, employees, even managers, simply do not understand why food safety rules are needed."

Archakov believes the course he leads will have an impact on those participants who are willing and ready for change and develop-



Malsag Archakov conducted a short virtual class on cold store operations.

CENTRAL ASIA ADVISORY COUNCIL

GCCA has formed an Advisory Council for the Central Asian countries of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. With 11 council members covering five countries, the Advisory Council formed in response to GCCA's collaboration with USAID's Competitiveness, Trade and Jobs (CTJ) project.

The Central Asian Advisory Council will serve the temperature-controlled products industry to help provide objective, insightful guidance and act as a sounding board on how to inform best-practices in the region as GCCA launches a series of cold chain short courses. The Council will contribute their experience, influence and understanding of the industry in an effort to improve and develop the cold chain in Central Asia. ment. "Long term, with proper training and implementation of the required minimum standards at each warehouse complex, the courses should have a very positive effect."

"The cold store operations training and education will help these companies be better employers, which will assist in recruiting motivated staff to perform the daily operations of the facility," notes Peter Blokland, Blokland Cold Storage.

The GCCA member instructors recorded training modules and participated in question and answer sessions with warehouse operators in the region.

Learning modules and instructors include:

- Cold Supply Chain Overview, Rusty Eason, WFLO Technical Advisor
- Cold Store Operations, local expert Umar Archakov, Havi Logistics Kazakhstan
- Food Handling and Temperature Management, Michael Jahncke, SAC Chair

- Temperature Monitoring and Documentation, Daniel Kaplan, WFLO Vice-Chair
- HACCP & Sanitation Standard Operation Procedures (SSOPs), local expert Malsag Archakov, Havi Logistics Kazakhstan
- Refrigerated Transport Overview, Manuel Cabrera Kabana, IARW Vice Chair, Friopuerto
- Cold Storage Design Lessons Learned, Brian Beazer, WFLO Chair, WCS Logistics
- Energy Management, Larry Laurin, Conestoga Cold Storage
- Cold Store Innovations, Irina Salatina, Kazakh Logistics Expert
- Emergency Preparedness and Risk Management Training, Peter Blokland, Blokland Cold Storage

Responding to why he volunteers as a WFLO instructor for warehouse operators from Central Asia, Blokland explains, "Before I can train others, I need to really understand the content, and that is personal growth. We discussed situations that are new for me as well. But the best part is, I meet new and interesting people – in the end, the people make the difference."

For Archakov, his hope is that sharing his knowledge and experience will help improve current storage conditions, working conditions for personnel and, in general, ensure food safety in Central Asia. "The main thing is that I get the opportunity to share my knowledge, and today, this is almost the only opportunity to do so."

The operators registered for these short courses can access five online training sessions on the cold chain, HACCP, warehouse receiving and sanitary transportation.

WFLO anticipates the project will finish in August 2021, but developing and maintaining relationships with cold chain leaders in the region will continue to further the goal of forging a universally strong cold chain. @



www. unitedinsulated.com 708.544.8200

Larry Lantero, JR President

Rich Maleczka Senior Vice President RICHM@UNITEDINSULATED.COM

COOL SOLUTIONS SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES

This column highlights a cold chain question and answer submitted through the GCCA Inquiry Service to the team of experts on the WFLO Scientific Advisory Council (SAC).

To get instant advice from a private, online community of over 4,000 cold chain professionals, simply post your inquiry in the GCCA Online Community. All GCCA Members and their employees can access the GCCA Online Community at community.gcca.org/home. There are active forums for Construction & Engineering, Government Affairs and Third Party Logistics.

If you are not a GCCA member, or are unsure how to post in the GCCA Online Community, contact the GCCA Inquiry Service at www.gcca.org/inquiry. GCCA Members can also browse the full archive of inquiries and responses in the GCCA Inquiry Service Archive. Access to previous inquiries is restricted to members of GCCA core partner organizations.

Q: What is the average KwH that a reefer container maintained at -18 degrees Celsius utilizes? I've looked online and have found a wide variety of estimates.

Over the years, we have assumed an average of 5 kW for freeze cargoes (at or about -18 degrees C). However, metrics regarding energy/power consumption of refrigerated containers can vary greatly since the amount of energy consumed by a reefer container will change depending on the size of the container (such as 20 feet vs 40 feet reefer), cooling requirements (full cool, partial cool etc.), fan speed and many external variables such as ambient air temperature and humidity conditions, the radiant heat load of the sun and road surfaces, the location of the reefer laden onboard the ship, the age and thermal efficiency of the reefer container, the leak rate of the reefer container, the refrigerant being used and advanced refrigeration technologies/ algorithms. Generally, the higher the set point temperature of the reefer container, the higher the electrical power consumption of the reefer.

As an example, manufacturer data for a certain type of reefer container states that at an ambient temperature of 37.8 degrees C, power consumption will vary for a 40-foot reefer container from 5.3 kW to 10.7 kW with a variation in set point temperatures of -29 degrees C to +21 degrees C, respectively.

It should be noted that most of the manufacturers' tests are conducted in controlled environments and therefore do not take into account actual commercial use of the reefer containers, such as variations in the ambient weather conditions. Answer was provided by WFLO Scientific Advisory Council Members Dr. Patrick Brecht, PED Commodities and Dr. Donald Fenton, Kansas State University. ⊗



CHILLFAST High Performance Freezer Door Systems

- Fast Return on Investment
- Low Life Cycle Cost
- Warm or Cold Side Mount
- Fast Lead Times
- Reduced Cooling Energy Costs
- Boosts Operational Efficiency
- Heated Guides and Bottom Edge
- Plug and Play Cable System







1-866-792-9968 TNRdoors.com



GCCA COLD CHAIN POLICY FORUM

FAIRMONT, WASHINGTON, DC JULY 26–28, 2021

THE COLD CHAIN POLICY FORUM is the can't-miss policy event for safety, compliance, and legal teams to learn the latest in cold chain rules and regulations.

- Government Affairs & Trends Keynote
 Presentations
- Policy-Focused Education Sessions
- Meetings with Key Agency Officials
- GCCA Committee Meetings (Government Affairs & Safety)



For more information and to register, visit www.gcca.org/policymeeting



WFLO SCIENTIFIC ADVISORY COUNCIL

Chairman and WFLO Scientific Advisor Dr. Michael Jahncke, Virginia Seafood Agricultural Research & Extension Center, Expertise: Fish Products

WFLO SCIENTIFIC ADVISORY COUNCIL Dr. Jeffrey Brecht University of Florida, Expertise: Cool-Climate Fruit & Produce

Dr. Patrick Brecht PEB Commodities, Expertise: Refrigerated Transportation

Dr. Paul Dawson Clemson University, Expertise: Poultry Products

Dr. Donald Fenton Kansas State University, Expertise: Refrigeration Engineering

Dr. Brian Fugate University of Arkansas, Expertise: Supply Chain

Dr. Cody Gifford University of Wyoming, Expertise: Meat Products

Dr. Dennis Heldman Ohio State University, Expertise: Food Process Engineering

Dr. Faris Karim Kansas State University, Expertise: Ammonia Contamination and Food Toxicology

Dr. Barbara Rasco Phd JD, University of Wyoming, Expertise: Food Safety, Food Safety Regulations

SAC EMERITUS Dr. R. L. (Bob) Henrickson Oklahoma State University, Expertise: Meat Products

Dr. Daryl B. Lund University of Wisconsin, Expertise: Food Science

Dr. Joseph Sebranek Iowa State University, Expertise: Meat Products **Dr. Kees Jan Roodbergen** University of Groningen, Expertise: Logistics and Operations Management

Dr. Vicky Salin Texas A&M University, Expertise: Agriculture Economics

Dr. Subramaniam Sathivel Louisiana State University, Expertise: Frozen Food Quality

Dr. S. Paul Singh Michigan State University, Expertise: Packaging & Labeling

Dr. Donald Schaffner Rutgers, The State University of New Jersey, Expertise: Microbiology

Brian Strouts AIB International, Expertise: Bakery Products

Dr. Charles White Mississippi State University, Expertise: Dairy Products

Dr. Elhadi Yahia Universidad Autónoma de Querétaro, México, Expertise: Tropical-Climate Fruit & Produce

Joseph Slavin Jos. Slavin & Associates, Expertise: Fish Products

Dr. W. F. (Will) Stoecker University of Illinois, Expertise: Refrigeration Engineering

GCCA GLOBAL EDUCATION

AND NETWORKING EVENTS (as of May 2021)

20 MAY, 2021

GCCA Digital Learning Session: COVID-19 Update Virtual / www.gcca.org

1–3 JUNE, 2021 GCCA European Cold Chain Conference Virtual / www.gcca.org

3 JUNE, 2021 GCCA Digital Learning Session: June Advocacy Update Virtual / www.gcca.org

17 JUNE, 2021 GCCA Digital Learning Session: COVID-19 Update Virtual / www.gcca.org

6–8 JULY, 2021 GCCA Brazil Curso Básico On-Line -Operações para Armazéns Frigorificados Virtual / www.gcca.org

12 JULY, 2021–12 AUGUST, 2021 WFLO Institute On-Demand Virtual / www.gcca.org

26–28 JULY, 2021 GCCA Cold Chain Policy Forum In-Person Meeting / Washington, D.C., United States

8–11 SEPTEMBER, 2021

57th WFLO Institute East In-Person Meeting / Atlanta, Georgia, United States

20–22 SEPTEMBER, 2021 WFLO Institute Latinoamérica In-Person Meeting / Mexico City, Mexico

26–29 SEPTEMBER, 2021 57th WFLO Institute West In-Person Meeting / Tempe, Arizona, United States

8–10 OCTOBER, 2021 130th IARW-WFLO Convention In-Person Meeting / Austin, Texas, United States

TBD OCTOBER, 2021 Melbourne, Victoria, Australia In-Person Meeting / WFLO Institute Australia

2–4 NOVEMBER, 2021 41st CEBA Conference & Expo In-Person Meeting / Las Vegas, Nevada, United States

TBD DECEMBER, 2021 GCCA Brazil Symposium In-Person Meeting / Sao Paulo, Brazil

*All events are subject to change due to COVID-19. Visit **www.gcca.org/events** for updates.

MEMBER NEWS NEWS FROM MEMBERS OF GCCA CORE PARTNERS



GAB Operations, constructed by A M King in south Texas, United States. (Photo courtesy of A M King.)

A M KING partnered with ALDI U.S. to provide property consulting, design and construction of ALDI's new facility in Loxley, Alabama, United States. The 570,660-squarefoot divisional headquarters and distribution center will service more than 100 stores in the southern United States. To facilitate social distancing, the main entrance lobby is a large two-story space enabling the flow of employees entering or exiting the building and a 2,600-square-foot outdoor flexible workspace was created next to break rooms and open office areas. A M KING has also begun construction of a distribution center for Mexico-based GAB Operations, LLC in south Texas, United States. The new 45,590-square-foot facility, when complete, will provide increased cold storage capacity for fresh produce and will serve as a hub for the GAB's U.S. and Canadian customers. The project is scheduled to be completed in October 2021.

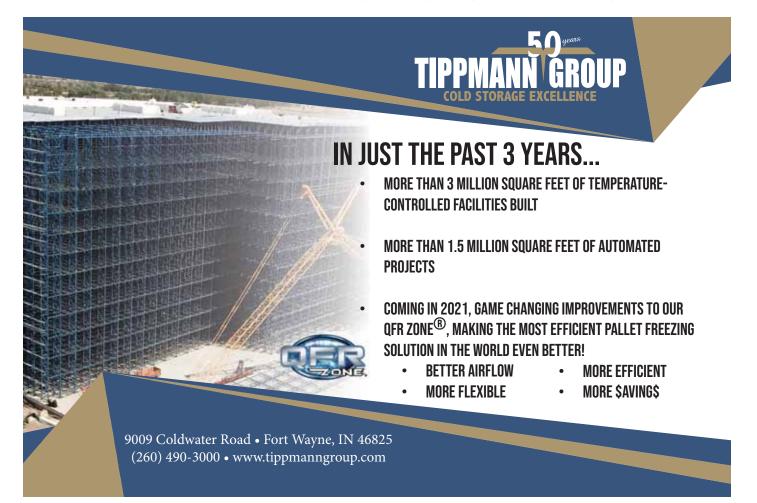
FREEZELINK Chief Executive Officer Owusu A. Akoto helped to transport 600,000 doses

of AstraZeneca COVID-19 vaccines into Ghana, West Africa, through the COVAX vaccine-sharing initiative. GCCA CEO and President Matt Ott said FreezeLink had a fleet of temperature-controlled trucks and was one of a few private companies providing the cold chain that was essential to prevent the life-saving vaccines from spoiling or weakening in strength. Akoto, who created FreezeLink to address the post-harvest losses in West Africa, said vaccine waste, due to poor cold chain infrastructure, was also a major issue in the region.

$\bullet \bullet \bullet$

LINEAGE LOGISTICS LLC has raised \$1.9 billion in a funding round that will help back additional acquisitions, build new facilities and develop warehouse automation technology.

MAERSK – in partnership with Zim and MSC – is providing a new service to the U.S. East Coast via the Panama Canal. It will circumvent capacity constraints on the Pacific trade routes as well as Southern California's ports at Los Angeles and Long Beach, which have resulted in substantial cargo delays. (See the article on page 12.) ⊗



ASSOCIATION NEWS NEWS ABOUT GCCA CORE PARTNERS

What a challenging, yet inspiring year 2020 was for the global cold chain industry. In the face of COVID-19, food logistics was tested like never before. Our industry rose to the challenge and our companies' frontline teams - part of the world's essential workforce - are to be commended for their brave and hard work over the past year. From warehouse members to construction members to transportation members to all the associates/suppliers and vendors, the entire industry came together to meet these challenging times head on. The first ever GCCA Annual Report provides a glimpse of just some of the challenges and successes 2020 brought. While COVID-19 has changed how we work and live, and has prevented many of the GCCA meetings planned to take place in person, we were able to repeatedly bring the industry together virtually throughout

the year. The 2020 GCCA Annual Report on association activities, as well as our regulatory accomplishments, is now available on the GCCA website.

The 24th **GCCA** European Cold Chain Conference will be held from 1-3 June 2021, as a **VIRTUAL** event due to the ongoing challenges of COVID-19. Throughout the virtual conference, attendees will hear from thought leaders and industry experts and get a better understanding of industry trends, perspectives and best practices. GCCA's European conference is designed for all segments of the third-party temperature-controlled logistics industry including warehousing, transportation, building and design, equipment and technology. Registration is now open. GCCA'S Cold Chain Index for the fourth quarter of 2020 showed that expenses for refrigerated warehouses rose by 3.36% in the United States, relative to the same period in 2019. Download the Index template to calculate what this means for your facilities. The Cold Chain Index is a customizable "rate builder" template that members can use to provide justification to their customers during rate negotiations. The Index tracks the growth rates of costs using predominantly official sources of economic data along with actual expense classes from the IARW Productivity and Benchmarking tool. The CCI can be customized to the region and state where a warehouse facility operates and includes five classes of expenses: labor, electric power, supplies, repairs and rent. GCCA is hoping to create a Canadian Cold Chain Index by early 2022.



Winchester Cold Storage, Winchester, Virginia

If you want to be green and reduce your plant's carbon footprint, use natural refrigerants, evaporative condensers, and minimize the number of compressors and condenser fans in your system. *The facts are:* for every 5-pound reduction in head pressure using evaporative condensers, you save 2% in compressor power. *That can be a 30% reduction in power!*

BONAR

Call Hank Bonar today! 904-631-8966 hank@bonarengineering.com

Bonar Engineering, Inc. PO Box 60009, Jacksonville, FL 32236

PROTECTING the foods FAMILIES foue

Sometimes it's farm-to-food processor-towarehouse-to-truck-to-grocery store-totable. GCCA members keep food products safe, reliable, and ready to eat by advancing improvements in technology, transportation and storage. **We are the #coldchain.**

Download campaign materials at www.gcca.org/pffl

Maury Klumok, former CEO of United Refrigerated Services and Chairman of the IARW from 1987-88, passed away peacefully at the age of 83. Maury went to work for his father-in-law at U.S. Security Warehouse in the 1960s, where he rose to lead the company, and saw the value in consolidation early on with his first acquisition of a local Atlantic Ice & Coal warehouse in 1966. In 1981, U.S. Security Warehouse merged with two other companies to form MRW with headquarters in Atlanta - soon after MRW became United Refrigerated Services. As CEO of the newly formed United Refrigerated Services (URS), Maury saw the value of a national distribution program to support strategic relationships. He started acquiring regional operations in the Northeast, Midwest and West Coast of the United States, resulting in more than 400% growth before his retirement, which came a few years before URS Logistics merged with Americold Warehousing to form Americold

Logistics. In his "retirement," Maury was also an investor and board member of Nordic Cold Storage. Maury was a gifted leader and he used his gifts to build a lasting legacy that has benefited many around the world.

$\bullet \bullet \bullet$

Did you finish a cold storage project between January 2019 and December 2020? The **CEBA** Global Built by the Best Award acknowledges association members around the world for their expertise and innovation in constructing, renovating and/or modernizing temperature-controlled buildings. The award is open to project teams comprised of contractor/ design-build companies, processor/end user/ warehouse/3PLs, and supplier sub-contractors that are association members anywhere in the world. To download an application and for additional information, go to gcca.org/builtbythebest. IARW has merged with ABIAF (Associação Brasileira da Indústria de Armazenagem Frigorificada), the Brazilian temperaturecontrolled warehouse association. The combined organizations will be known as GCCA Brazil. After a three-year joint venture agreement, both associations formally voted to approve the merger on 17 December 2020 and it was finalized in March 2021. Originally established in 1979, ABIAF was recognized as Brazil's leading association for all issues related to the cold chain, striving to provide the best services for all its members at a reasonable cost. The objective of GCCA Brazil is to deliver services, resources and programs that will add value to all Brazilian cold chain businesses and build upon the legacy that ABIAF has created over the years. **②**

🂐 Controlant

Is your supply chain control tower ready to operate in a post COVID-19 world?

Cold Chain as a Service®

Integrated technology and services for your end-to-end cold chain.

Controlant is introducing Aurora®, the next-generation digital visibility software platform, and Saga® data loggers that digitally connect the global cold chain to help maintain product quality while substantially reducing waste The new family of Saga® data loggers captures the story of your supply chain—air, road, rail, and sea—and delivers mission-critical insights in real-time while automating processes. Improve your supply chain visibility, build better business outcomes, improve customer satisfaction, and increase sustainability.



FOOD SAFETY IS ALWAYS IMPORTANT ... BUT EVEN MORE SO IN A PANDEMIC.



FIND OUT HOW THE COLD CARRIER CERTIFICATION PROGRAM CAN:

IMPROVE YOUR OPERATIONS

Guides your review & improvement of company practices for the sanitary and safe shipment of perishables.

DEMONSTRATE YOUR COMMITMENT

Shows your customers that you're doing your utmost to ensure the safety and sanitation of perishable shipments, protecting their brand.

DIFFERENTIATE FROM YOUR COMPETITORS

The Certification shows your status as a leader and you commitment to improving the cold chain.

gcca.org/certifiedcoldcarrier

160 facilities

have already made a commitment to improving the cold chain



Bankable savings over time + industry recognition www.gcca.org/energyexcellence



Celebrating 110 Years of Milestones

THE GOLD STANDARD IN INDUSTRIAL REFRIGERATION CERTIFICATION

Education · Certification · Community Career Center · Annual Conference National Apprenticeship Program

Refrigerating Engineers & Technicians Association www.reta.com www.reta-ti.org jobs.reta.com



NEW MEMBER COMPANIES OF GCCA CORE PARTNERS



CEBA MEMBERS

Allana Cold Chain Solutions Mumbai, Maharashtra, India

Duna USA Baytown, Texas, United States

Puga Thermal Services Marietta, Georgia, United States



IARW-WFLO WAREHOUSE MEMBERS

Cold Terminal of Laredo Laredo, Texas, United States

Sunland Distribution of Florida Waverly, Florida, United States



IRTA MEMBERS

Cold Terminal of Laredo Laredo, Texas, United States

Sunland Distribution of Florida Waverly, Florida, United States @

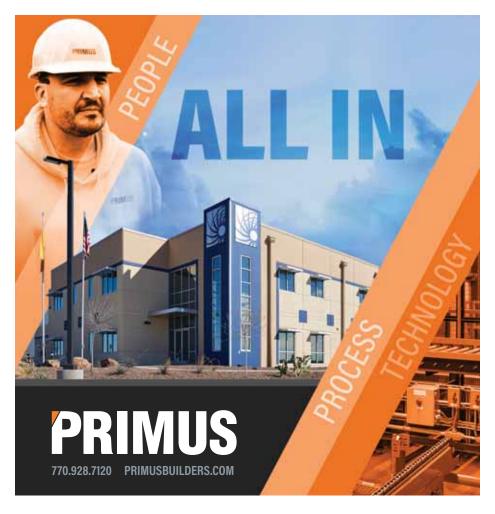


IARW ASSOCIATE MEMBERS

Colliers International, Inc. – Bakersfield Bakersfield, California, United States

Energy Partners Refrigeration Centurion, Gauteng, South Africa

LHL Attorneys Illovo, Sandton, South Africa





ADVOCACY | INDUSTRY PROMOTION | RESEARCH | INTERNATIONAL



GCCA STANDS WITH YOU. THE TIME TO ACT IS NOW.

Never before has our industry faced such uncertainty and vulnerability from America's policy makers, both in the White House and in both chambers of Congress. A new Administration and new Congress represent new challenges and opportunities that we will need to face as an industry, together.

The incoming Administration and Democratic controlled Congress could implement burdensome regulations and increase oversight over our industry in a number of ways. This includes:



OSHA COVID-19 STANDARDS

- Enacting a national emergency temporary standard for industry
- Sets the stage for permanent regulation on infectious disease control in the workplace



CLIMATE CHANGE

- Pursuing aggressive policies to address climate change, through both executive action and legislation
- Rejoining the Paris Climate Agreement, eliminating greenhouse gas emissions, and implementing the Green New Deal

TAXES

- Rolling back the Trump tax cuts
- Increasing the corporate tax rate from 21% to 28%, phasing out deductions for pass-through entities
- Raising the top marginal income-tax rate from 37% to 39.6%
- Less money in the pockets of businesses means less jobs available for hardworking employees

A Democrat controlled White House and Congress will only mean more rules, regulations and burdensome policies.

THERE IS SOMETHING YOU CAN DO.

To learn more about how you can contribute contact Lowell Randel (Irandel@gcca.org) or visit www.gccaadvocacy.org. Visit ADVOCACY.GCCA.ORG for more information.



+1 703 373 4300 EMAIL@GCCA.ORG GCCA.ORG 241 18TH STREET SOUTH, SUITE 620 ARLINGTON, VIRGINIA, 22202

- /GLOBALCOLDCHAINALLIANCE
- @GCCAORG
- (D) /GLOBAL-COLD-CHAIN-ALLIANCE-GCCA

- Strengthening worker organizing, collective bargaining and unions through executive action and legislation such as the PRO Act
- Labor initiatives, like 'micro-unit' organizations and joint employer policies could quickly be reinstated

ADDITIONAL REGULATIONS

- Revisiting EPA's Risk Management Program (RMP) regulation and making additional requirements
- Changes to Process Safety Management

COOL PERSON PROFILING INFLUENTIAL PEOPLE CONNECTED TO THE COLD CHAIN INDUSTRY

ANTHONY LEO IN MEMORIAM

THE GLOBAL COLD CHAIN COMMUNITY LOST A VALUED AND RESPECTED LEADER – ANTHONY "TONY" MICHAEL LEO, 46, CEO OF RLS LOGISTICS, PASSED AWAY PEACEFULLY WITH HIS LOVING FAMILY BY HIS SIDE ON MARCH 11, 2021. HE WAS ACTIVE IN THE BUSINESS COMMUNITY AND LOCAL CHARITIES AND WAS SERVING ON THE BOARD OF DIRECTORS AS TREASURER FOR THE INTERNATIONAL ASSOCIATION OF REFRIGERATED WAREHOUSES (IARW) AT THE TIME OF HIS PASSING.

As CEO of RLS Logistics, Warehouse Group, Tony was instrumental in helping RLS become the largest family-owned cold chain logistics provider in the Northeast United States. Devoted husband and father, Tony enjoyed bringing his family to various business events all around the world. His sense of humor and wit was enjoyed by family and friends alike. Tony was well respected by his industry peers and colleagues. He truly loved nothing more than spending time with his family and working on the growth of the family business.

Born on February 26, 1975, to Anthony Leo and Jean Leo Esposito (Cristaudo), Tony graduated valedictorian from Delsea Regional High School in 1993, and went on to earn his bachelor's degree and MBA from Rutgers University.

Tony is survived by his loving wife of 20 years, Colleen Leo; daughters Anna Marie and Megan Leo; father Anthony Leo; mother Jean Esposito (Howard); brother Russell Leo (Jacqueline); sister Stephanie Leo Pustizzi (Andrew); in-laws Jim and Dale Leary; sisters-in-law Patty Fabrizio (Joe), Melissa Vitale (Jim); brothers-in-law Jim Leary (Lindsey); Wayne Lehto (Melissa); sister-in-law Lori Lehto Blizzard (Allen); and many nieces and nephews.

At the family's request in lieu of flowers that donations in memory of Anthony may be made to your favorite charity. \otimes









GREEN SPAN PROFILES

MANUFACTURING SPECIFICALLY FOR THE LOW TEMP/COLD STORAGE INDUSTRY



- Ultra-Competitive Pricing
- •On-time Deliveries
- •Superior Thermal Performance
- •Outstanding Structural Performance
- •Available in USDA Painted, Plastisol and Stainless Steel



"Built to perform. Built to last. Built right."





FM

APPROVED







J844-807-7400 ≥ info@gsplc.com

Contact Us

💿 800-532-3667 | www.jamisondoor.com 🍈

4816 Zane A Miller Drive, | Waynesboro, PA, 17268 💿

NOW

'OPENING THE DOORS' TO NEW

JAMISON BM

Marking our continued expansion is a new 50,000 square-foot BMP high-speed fabric and rollup facility in PA set to forge into additional product lines. We are excited to not only be a one-stop shop for the cold storage industry, but to also move into the general industrial market!

what we do?

- DynamicRoll®
- DynamicRoll[®] Stainless
- DynamicRoll[®] Food PE
- DynamicRoll® Clean Room
- DynamicRoll[®] Retail
- DynamicRoll® Frigo 2

JAMISON BMP

- Pack
- Mega Pack
- ThermicRoll Standard Headroom
- ThermicRoll Low / Oval Headroom

FLOOR FACTS

FOR OPERATIONS

Easy cleaning, light reflecting, reduced axle and transmission repairs, better pick rates, and faster driving

FOR HUMAN RESOURCES

Lowered operator fatigue, increased morale, safer driving and higher retention rate

FOR THE BOARD OF DIRECTORS

Longer lasting, lowered equipment cost, higher throughput, lowest total cost of ownership

Reduce unnecessary distractions, increase profits, and strengthen your reputation as a world-class distributor.





INDUSTRIAL FLOOR CONTRACTOR



Building Value For You WORLDWIDE SERVICE

HOME OFFICE 1680 E. 69TH AVENUE DENVER, COLORADO 80229

(303) 674-2290 KalmanFloor.com info@kalmanfloor.com

Non-dusting

BEST INVESTMENT

KALMAN FLOORS HAVE UP TO 90% FEWER JOINTS





Easy-to-clean Self-polishing Abrasion-resistant

Longest warranty in the industry